

Commonwealth of Kentucky
Division for Air Quality
EXECUTIVE SUMMARY

Final
Conditional Major / Operating
Permit: F-08-018
Bakery Feeds
Henderson, Kentucky 42420
September 16, 2008
Esmail Hassanpour, Reviewer
SOURCE ID: 21-101-00119
AGENCY INTEREST: 38442
ACTIVITY: APE20080001

SOURCE DESCRIPTION:

Bakery Feeds applied to the Kentucky Division for Air Quality on April 16, 2008, to renew their current permit (F-03-008) in Henderson, KY. Bakery Feeds recycles waste bakery products consisting of cookies, crackers, cereals, breads, snack foods, dough, and similar products at Henderson, Kentucky. These materials are brought into the plant by tractor trailer and off-loaded inside the building directly onto the receiving floor. They are then blended using mobile equipment and moved to a staging area. The same mobile equipment then loads the product into the receiving hopper.

Raw materials are transferred from the receiving hopper to a hammermill to reduce the size of the materials to facilitate uniform drying of the product. Raw materials are moved from the hammermill by conveyor to a ten foot diameter by fifty foot long rotating drum dryer. The dryer reduces the moisture content of the raw materials. Product is moved through the dryer by tumbling action and by the movement of air pulled through the dryer, the drop out box at the end of the dryer and a product recovery cyclone by the induced air fan. All material removed in the drop box and the cyclone is put back into the process. All air is discharged through a stack immediately downstream of the fan.

Dried raw materials are conveyed to vibrating screens used to size the product and recover the packaging materials. Finished product passing through the screens is moved by covered screw conveyor to storage. Packaging materials are pneumatically removed from the screen, mixed with sawdust and fed into a hammermill for a final size reduction before being sent to the biomass burner to be used as fuel. The finished product that cannot pass through the vibrating screen is directed to a finishing mill for size reduction. Product is returned to the screen after the finishing mill to be resized. This cycle continues until the entire product passes through the screen and is placed into storage.

Finished product is finally moved from storage to the truck loading area where it is loaded onto trucks for delivery. Truck loading is conducted inside the building to minimize fugitive emissions. The biomass burner generates heat for the drying process by burning sawdust mixed with shredded packaging materials. Heat and products of combustion are pulled from the burner, through the dryer, the drop box and the dryer cyclone by the dryer exhaust fan. The fan then discharges this air by way of the 150 foot tall exhaust stack. The source is adding a potash transfer operation with emission of particulate matter less than five tons per year to the insignificant activity list in Section C of the permit.

PUBLIC AND U.S. EPA REVIEW:

On August 16, 2008 the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in Henderson gleaner Henderson, Kentucky. In addition, notification of the issuance of the draft permit was sent to the U.S. EPA on August 11, 2008 via e-mail. The public comment period expired 30 days from the date of publication. No comments were received during this period. The permit is now being issued final.